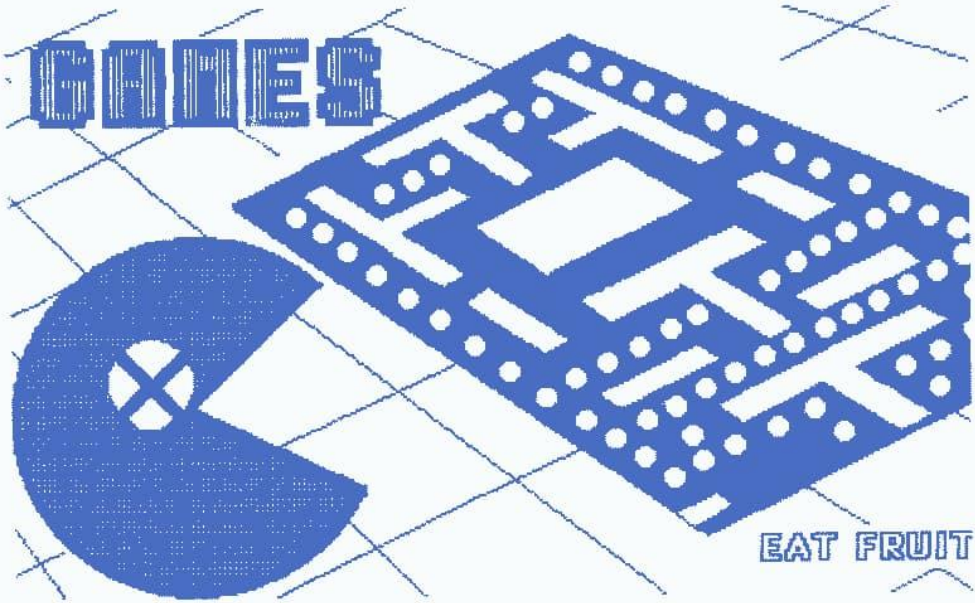
Fairfax Core Computers

Jan. 21,1985

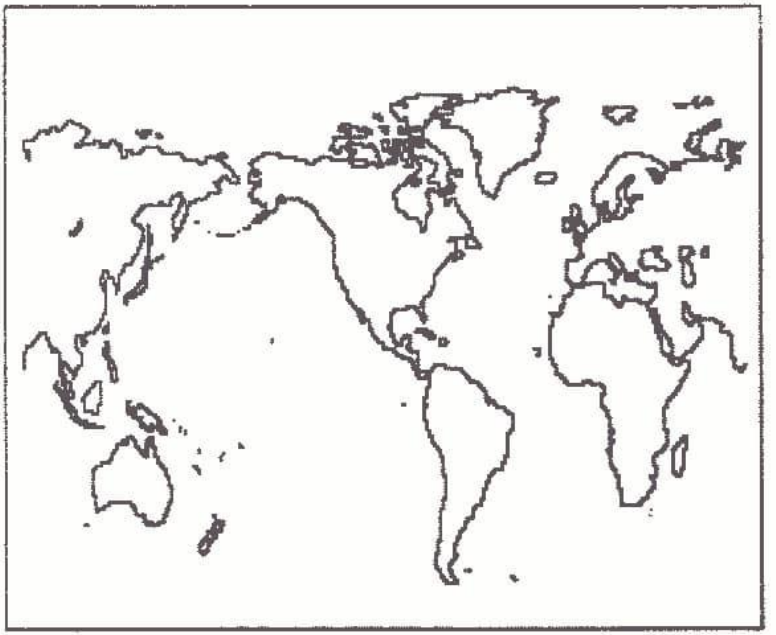
Vol.1 No.7

$1.60



INSIDE...

Editorial 3
January Agenda 4
Membership Application/Renewal 5
Playing the Game 6
Game Poll Results 8
C-64 Games Design 10
What are Databases? 12
Database 13
December Minutes 14



MACCOM SYSTEMS LTD.

DISKETTE PRICES SLASHED!

3½ MAC	MEMOREX ssdd	XIDEX ssdd	DYSAN ssdd
$59.00	$24.95	$29.99	$32.99

in stock now at

43 WILLIAM ST.
749-1232

PaperClip	$84.95	Flight Sim2	64.99
BusCard II	169.95	Koala Pad	$99.99
BI 80	$169.95	CODE Pro	$77.00

OTTAWA HOME COMPUTING

OTTAWA HOME COMPUTING is the newsletter of the Ottawa Home Computer Club. Membership is open to all with a genuine interest in personal computing for $15/year in Canada. Membership includes OTTAWA HOME COMPUTING. Meetings are usually held on the third Monday of each month, 7:30 PM, at Charlebois High School, corner of Heron Road and Alta Vista Drive in Ottawa.

When submitting articles please print or type with a fresh ribbon, 8-1/2 x 11 inch white paper, double-spaced on one side only. Leave one-and-a-half inch borders on all four sides.

Permission to reprint articles appearing herein is hereby granted, provided credit to both the author and Ottawa Home Computing is given.

Advertisements of personal items up to 25 words for one insertion per issue are free to members. Inquire for commercial rates.

Address all correspondence to:
Ottawa Home Computer Club,
P.O.Box 4164, Station "C",
Ottawa, Ontario K1Y 4P3.

EDITORIAL

by Paul Irwin

Games! We all have them on our computers, even those who obstenibly compute in business only. There are so many available now, its impossible to know them all. Just keeping up with the best sellers is a job all by itself.

The thing to do is pick one kind of game to investigate. What is your favourite? Arcade types like Pacman and Frogger, or strategy games like chess? How about heroic adventures in strange, magical lands? Some simulations, like Flight Simulator, are so realistic that you can use them as training aids instead of games. Choose the type for your moods and interests.

Graphic art! Thanks to Scotty Adams for the cover design -- looks great, Scotty.

Scotty is also responsible for the "clip art" - all those neat drawings in this issue. They come from Mac the Knife, in Scotty's Macintosh.

The meeting this month, on Jan. 21st, features games. Our Education Director, Wayne, is putting it all together with a little help from his friends, all volunteers. Thanks to all those who are bringing in computers and games to show us.

JANUARY AGENDA

by Wayne D. "SKIP" Schaler

Come and see all the games that you didn't get for Christmas. Bring the kids.

7:30 Disk of Month
Memberships
Socialization

7:50 Business Meeting

8:30 Games demos. Circulate and see them in several rooms.

9:50 Meeting ends.

In addition, Paul Anderson will continue Disk of the Month. Brent Goss will meet with Macintosh people. And there is a FIG meeting. Watch for locations at the Business Meeting beforehand.

WHERE THE GAMES ARE

Room 229

Apple II+ with Andrew Brown:
- Air Traffic Controller
- Decathalon
- Castle Wolfenstein

C-64 with Bob Decarie
- Jumpman
- Space Taxi
- Lode Runner
- Tapper

Executive-64 with Mike Coltras and Dave McKay
- Impossible Mission
- Summer Games
- Ghost Busters

Room 223

C-64 with John Herzog, Stephen Herzog, & Michael Herzog
- Beachhead
- Zaxxon
- Pitstop
- Quest for Tires

C-64 with Real Laurin & Michael Laurin
- Temple of Apshai
- Frogger
- Donkey Kong
- Choplifter

C-64 with Michael Ruller & Randy Ruller
- Q*bert
- Impossible Mission
- Solo Flight
- Buck Rogers

Room 224

Apple II with Mike Bryan
- Sargon II
- Fastgammon
- Hard Tack Mack
- Checker King

C-64 with Peter Martin & Gordon Martin
- Archon
- Mule
- Spy vs Spy

C-64 with Tom Kaplan & Chris Kaplan
- Ultima
- One on One
- Raid over Moscow

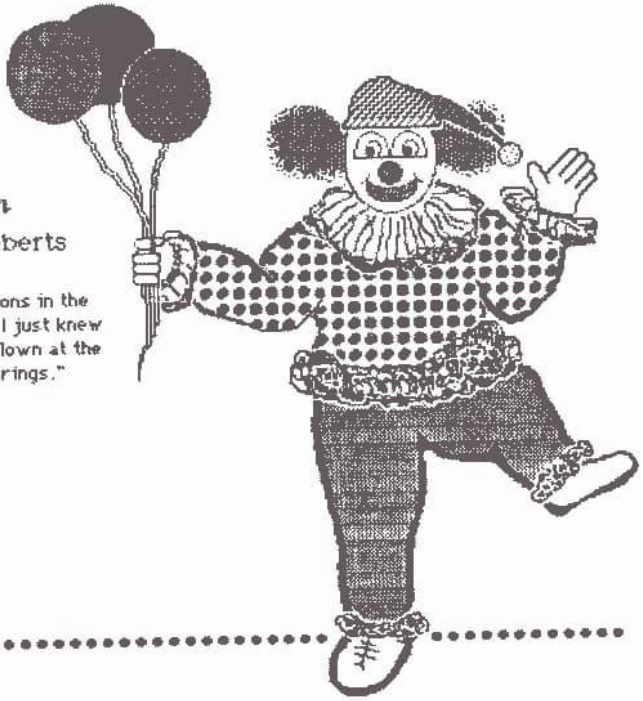
Room 225

Apple II+ with Scotty Adams
- Spare Change
- Bouncing Kamungas
- Scott Adams Games Special

C-64 with David Power
- World's Greatest Baseball
- Flight Simulator II
- Zork III
- Koala Joy

C-64 with John Batchelor. John will demo several of the games he created and will answer questions on games design from those interested in programming.

Mac T. Knife



Funny Clown

by Karen McRoberts
Evansville, IN

"When I saw the balloons in the MacPaint™ manual, I just knew they had to have a clown at the other end of their strings."

RENEWAL TIME

NAME _____

ADDRESS _____

CITY _____ PROV. _____

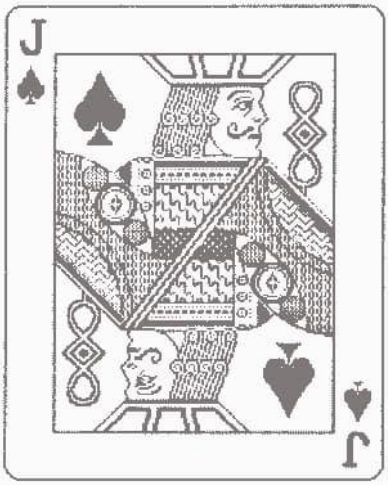
POSTAL CODE _____ PHONE _____

COMPUTER _____ OHC # _____

PLEASE MAKE CHEQUES PAYABLE TO: ($15/YEAR)
OTTAWA HOME COMPUTING
P.O. BOX 4164, STATION 'C', OTTAWA, ONTARIO, K1Y 4P3

PLAYING THE GAME

by Scotty Adams



Although as Apple librarian I have tried most of the games in our library, and have probably looked at at least a thousand more commercial games out of curiosity, I must admit that I am not much of a game player. I have finally decided I don't have the interest in eye/hand coordination types, which most of the arcade games are. Time to play on the computer, as opposed to word processing, cataloging, copying orders, etc., is very precious as it is rare. If the mood calls for a game rather than producing graphics, I usually play old adventure games. These are not the role playing character building type, but the puzzle solving kind, designed by Scott Adams (no relation). Adams writes for *Adventure International*; those versions I have were originally purchased on cassette! Real antiques.

"... I stood at the bottom of a deep chasm. Cool air sliding down the sides of the crevasse hit waves of heat rising from a stream of bubbling lava and formed a mist over the sluggish flow. Through the swirling clouds I caught glimpses of the ledges high above me: one was bricked, the other appeared to lead to the throne room I had been seeking.

"A blast of fresh air cleared the mist near my feet and like a single gravestone a broken sign appeared momentarily. A dull gleam of gold showed at the base of the sign before being swallowed up by the fog above. From the distance came the angry buzz of the killer bees. Could I avoid their lethal stings as I had managed to escape the wrath of the dragon? Reading the sign might give me a clue to the dangers of this pit.

"I approached the sign slowly ..." [from an ad]

And so it goes, hour after hour, as you guide your computer through an effort to amass fortune in the worlds of imagination. The older versions have no graphics as do the newer versions. I know these programs are available for other computers too; not just Applers get to have this fun. Actually you are playing a game against Scott Adams, and his mind has some odd quirks with a mean sense of humour -- to say nothing of a diabolical streak... Like when I died of radiation poisoning because I was only carrying the protective suit instead of wearing it in MISSION IMPOSSIBLE. Or when I had won out against all odds and built the boat to get to the island where the treasure was, and couldn't think of the magic words to make the boat go in PIRATE.

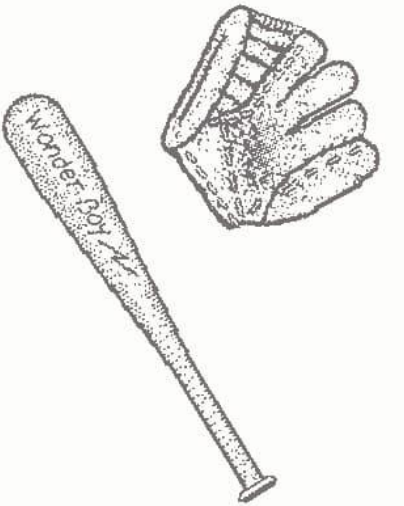
At least I've done these. I can't find the material to make the fuse for the gunpowder in GHOST TOWN, nor yet the

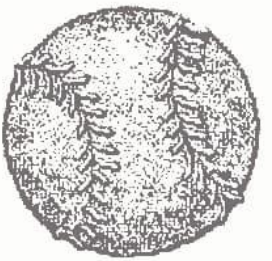
special words to open the giant clam in PYRAMID OF DOOM. Maybe next time.

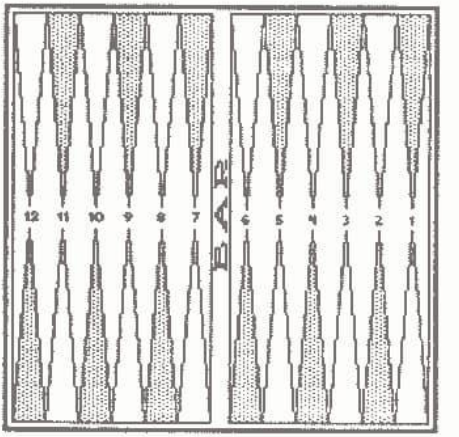
For people who like adventure games, we have several in our catalog. By far the most popular is the EAMON series, which has to be the biggest game I know with over 50 disks. Each is a seperate adventure, but as you play you can accrue money, power, etc. and carry these from one game to the next. Ask me about this at the next meeting if you wish to know more.

If you know how, tell me: how do you get the horse out of the stall in GHOST TOWN?

==========







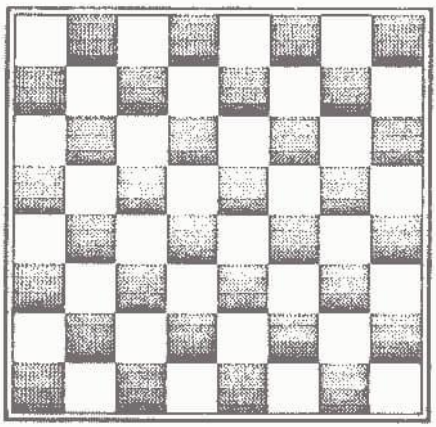
GAMES POLL RESULTS

by Wayne D. "SKIP" Shaler

At the December meeting, we took a poll to find out just what are the best and worst choice of games. The results from 116 ballots chose 60 best games and 121 worst games. In the lists shown, many tied for the same rank. So, two games tied for first place as best game: Jumpman and Flight Simulator II. And, Pacman came in as the worst choice.

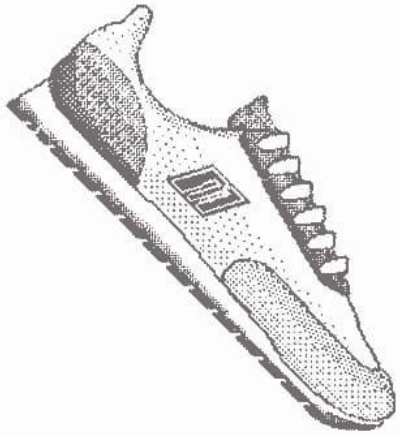
So, how does our choice compare with the gaming press? *Electronic Games* is an excellent magazine with select hardware and software reviews. It Contains hints, previews, and predictions each month. Look at their January hits, listed here.

Want to compare live games yourself? We have twelve computers scheduled for the January 21st meeting. Nineteen people plan to demo over 40 games. Adventure games. Simulators. Action mazes. Shoot 'em ups. Racing games. Sports. Strategy games. Fantasy. War. Board games. Even a movie spin off.



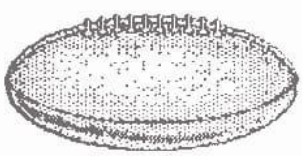
Ottawa's Best Choices

1-st	Jumpman Flight Simulator II
2-nd	Impossible Mission
3-rd	Summer Games
4-th	Lode Runner
5-th	Ultima III
6-th	Beachhead Zaxxon Archon
7-th	Chess 7.0 Sargon II Grandmaster
8-th	Ghoostbusters Raid over Moscow Computer Baseball
9-th	Quest for Tires Pit Stop
10-th	Spy Hunter Raid on Bungling Bay One on One



Ottawa's Worst Choices

1-st	Pacman
2-nd	Frogger
	Temple of Apshai
3-rd	B.C.'s Quest for Tires
	Threshold
	Congo Bongo
	Monopoly
	Attack of Karate Devils
4-th	Moon Patrol
	Q'bert
	Kickman
	Omega Race
	Pogo Joe
	Spider and Fly
	Raiders of Lost Tomb
	Siren City
	Trivia
	Pegasus
	James Bond



Electronic Games Magazine
January '85 Ratings

1-st	Miner 2049er
2-nd	Donkey Kong
3-rd	Buck Rogers
4-th	Choplifter
5-th	Flight Simulator I
6-th	Q*bert
7-th	Lode Runner
8-th	Zork I
9-th	Summer Games
10-th	Zaxxon
11-th	Pole Position
12-th	Donkey Kong Jr.
13-th	Ultima III
14-th	Mrs. Pacman
15-th	Frogger

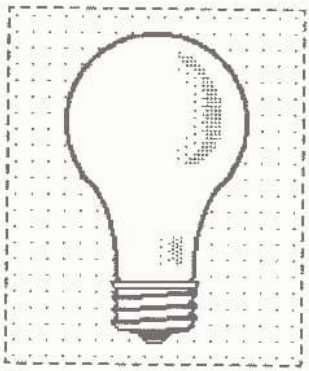
C-64 GAMES DESIGN

by John Batchelor

SOUND AND MUSIC TECHNIQUES
Sixth of a series

Whole books have been written on C-64 sound. I am no expert although one of the reasons I bought my machine was to experiment with sound and music. The famous SID chip has marvellous capabilities, but has a lot of quirks. For example, when I tried to write a machine code routine clearing all the SID registers, it only worked ecery other time I tried it! Turns out that you have to POKE the zeros in from 54272 to 54296, in that order; not from the top down; to get reliable results. Strange things also seem to happen when you gate a voice on and off very rapidly. Perhaps an expert could tell us the hows and whys, but my advice this month is boils down to: *borrow what works from other places.*

You can find nice sounds in BASIC programs from books and magazines. You don't have to re-invent an explosion sound or a laser zap. Music is a little harder. There are lots of programs which play little songs at the beginning or end of a game. They read in a lot of frequencies and durations from DATA statements. What they don't do is give you simultaneous music and sound effects with the game action. To do this you need an interrupt driven machine language routine. Your C-64 checks the keyboard and updates the display 60 times a second. You can give it an extra chore every interrupt to play some music. An article in the July 83 *Compute!* p.212, showed you how to do this on the VIC-20. You



Bright Ideas:

must make the changes for the C-64. Borrow my versions from SPACE-BOX or SPACE CHASE. The latter is a two voice routine to add some harmony. In LETTER HUNT, I change the sprite pointers every time I change the note frequency to make the characters dance in time with the music. Note that, instead of gating the SID chip off by making the last bit of the waveform register a zero, I use a zero frequency. Zero is a rest or silent note, between the other notes. This avoids the above-mentioned troubles with rapid gating. The SID does not have to cope with attack and decay overlapping.

One of the best uses for the sound chip however has nothing to do with music or sound. Voice Three can be read at $D41B by PEEK(54299) as a number between zero and 255. If

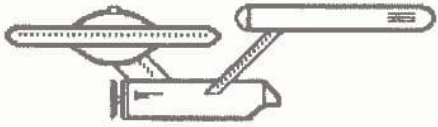
Voice Three is programmed as a high frequency noise, you have a dandy random number generator. The sawtooth and triangle waveforms at lower frequencies are good for cyclic motions. For example, the X-coordinates of a sprite could be modified by the value of 54299 on the triangle waveform. The sprite would sweep back and forth at the frequency of the Voice Three registers. Location 54296, the master volume, can be used to turn off any odd sounds from Voice Three by OR-ing with 128. I use the random number technique in my games so that I don't have to use pre-set patterns of movement or layout that a player could memorize.

Finally, let me recommend the SONG EDITOR program in the October issue of *RUN* magazine, p.80. It lets you compose a three part song and store it as a self-contained module at $C000, decimal 49152. It will play in the background of another program after SYS 49152 or JSR $C000. If you want the song to play continuously just PEEK(49734) often. When it has a zero value, SYS 49152 again.

I apologize if these tips on sound assume that you are beyond the elementary stage in programming games. My goal in these articles is to pass on things you may not find elsewhere and to save you from making all the mistakes I've made in the past. See me at club meetings or phone at reasonable hours -- 226-1854, if you want to discuss games design at any level. Finally, let me disclaim authorship of RED BARON or SPACE PATROL as may have been implied on the November club disk. I just passed them along.

Next month, some notes on instruction etiquette and memory layout. After that I propose to take us through the development of a whole game; probably CRATER GUNNER.

==========



NCC1701

WHAT ARE DATABASES?

by Wayne D. "SKIP" Shaler

Databases can be defined in simplistic terms as locations where large amounts of information are systematically stored for easy manipulation and retrieval. A library could be considered as a database; so could an accountant's ledger.

However the term database normally refers to a rather sophisticated computer program that can hold and manipulate information that it is able to access from data banks which are held in the form of files and are contained in large main frame computers. Smaller databases for personal computers can also be very thorough and useful, if one learns how to input the data needed and asks the questions that are within the scope of the program and the information contained within the files. The main limitations of personal DBs are a slower speed and the smaller size of the information banks. Uses range from listing your household inventory to your computer programs. Business usage could cover the monthly mail billing lists, or to stock inventories of nuts and bolts in a hardware store.

Is the home computerist limited to the storage capacity of his computer or disk memory? Not at all. With your computer and a modem you can communicate with most of the large main frame computers for a price, and many bulletin boards for free. Just remember you are really accessing their databases. In some cases you can even store your data information within their databanks where, if you like, they will have their programs work on the data performing whatever functions you request. You will soon shop, bank and check out the local sports team statistics all from the convenience of your armchair at home simply by accessing one of the available databases. Of course you will need a modem and terminal package which will be the subject of an upcoming educational Specialty night.

An extra value of a database is its ability to interact with other programs such as a wordprocessor, a spreadsheet, a financial program or even a graphics program of some sort. One solution is the multiple function program such as the one that Brian Morrow displayed in the December meeting or perhaps the concept of a dedicated machine with firm programs such as Commodore's Plus-4. You should also consider whether that new data base you are considering is compatible with your existing word processing or financial packages. Often the information packages created by one can be read with little or no adaptation by another program for easy usage and manipulation.

Interchanging data between programs is a lot easier than retyping it. [You better believe it...Ed.] An example of such a usage would be to put a mailing list from your DB into your word processor or home inventory into your home financial package. Note: If your computer salesman can't answer your questions about compatability of program information he is behind the times. Find one who can or will allow a return if compatability is not possible as he claims.

DATABASE

by Paul Anderson

For some of you newer people to the world of computing, a database is a collection of facts and information usually arranged in some systematic order so that individual pieces of information can be retrieved. As an example of a database is your telephone book the names are listed in alphabetical order so that if you know the correct spelling of the name you will be able to find it quickly and upon finding it, you will also find the telephone number and a partial address for the person. There is one flaw with the telephone book as a database; the problem comes when you are trying to find the number for John Smith. There are 81 possibilities in the book for J or John as a first name. If you know the address then it is just a tedious task to look at each entry until you match the address, but if you don't know the address you will probably give up and hope that John Smith will phone you back.

A database is usually constructed from a group files and each file contains a number of fields. Going back to our telephone book a file is a person's name, address, and phone number. A field is just the name, or the address, or the telephone number; so each file in thephone book consists of three fields.

Now back to the John Smith problem if we had all the J or John Smiths in our datbase we could attack this problem in two ways. The first one I'll discuss is the use of sorting. If we know the street address is 129 Post Road then we could tell the program to sort the second field of each file and put them into a descending order with numbers first then letters. At this time you would be able to look at your newly-sorted data and it would be quite easy to find 129 in the list and you would probably find that there is only one number 129 and even if there were a couple of 129's, Post Road would be quite obvious and easy to find.

The second method would be to use a search function. In this method we would tell the program to search the second field for the address 129 Post Road and the computer would return with all the matches of this address. We could speed up this process by specifying a smaller search string such as using just 129. In a database such as the telephone book, the chances of making more than one match when using a short string is quite slim because the nature of the data in the database is very random. With a database such as a parts catalog, a small search string could cause many matches because you could have many numbers that start with 129.

In the first example of searching I assumed that we would start pattern matching at the beginning of the field. Another method of searching is to look for a match any place in the field specified. If we did not know what the house number was, but knew that the street was Post Road then with this type of search we could locate the right John Smith by asking the program to search for any match within the field desired. This type of search will take longer to accomplish because there is a greater quantity of data to search.

The preceeding explanation would be for a very simple database program which would be capable of storing data,

retrieving data, displaying it, sorting individual fields, and searching for a specific item within a field. More complex programs also have functions for setting up the data to be printed into unique arangements for printing reports with heading titles and comments interspersed among the data and are able to extract specific fields from the file and ignore the rest of the information that might not be appropriate for the particular report being prepared.

Another feature found in some database programs is the ability to do simple mathematics when preparing a report. Eg. You have 15 salespeople who are all selling small, medium, and large Gazorninplunks so you set up a file for each person and record in separate fields the number of Gazorninplunks of each size they have sold. When it comes time to make a sales report for the boss you set up a report that lists each person and the number and size of each item they sold. You then tell the program to multiply the price of each item sold by the quantity sold by each salesman and record it in your report. You then have the program add all the individual sales for each salesperson and record this value in your report as the gross sales for each person. You could continue on and report on the gross sales of the whole staff.

I hope that this short explanation of databases will help some of you to understand what is being talked about and possibly giving you some ideas for more uses for your computer.

DECEMBER MINUTES

by Wayne D. "SKIP" Schaler

Brian Morrow opened the meeting. He gave an update on club news and on the latest Commodore machines such as the C-116 and Plus-4. Scotty Adams informed us of the latest Apple developments, promising that Macintosh indeed is going colour and we would all be red with envy.

The main part of the December meeting was on databases.

Five informative speakers each gave ten minute overviews of both Commodore and Apple databases. Then, for the remaining fifty miutes of the evening, each speaker gave an in depth presentation of a data base in a seperate room. This format you may recall, was the one we used previously when we had the word processing evening last September.

In addition, three extra rooms hosted topics other than DBs, a grand total of eight.

For Forth hackers, there was a FIG in one room. Also, the Macintosh users held a session. And, Paul Anderson held a general interest confab and Disk-of-Month meeting.

For Apple users, John Hanna had LIST HANDLER and Mike Bryan showed ST.A.R.-- the public domain database that keeps our membership roll.

Three speakers presented Commodore DB's. Joe Gomdo brought us a new, versatile DB called SUPERBASE. Denis White returned from his popular PAPERCLIP with THE CONSULTANT; it used to be called DELPHI'S ORACLE. Brian Morrow gave us a double treat: his DB DAISY and his latest DB package preview. Still under development, this latest program combines a data base with a word processor, a spreadsheet, and a graphics utility.

All these seperate sessions were well attended and well received.

Join **TPUG** the World's largest Commodore users' group

- Free information-packed **Monthly Magazine**
- Access to 4000 **Public Domain Programs**
- Annual **Convention**
- Member **Bulletin Board**
- For $30.00 ($20.00 for students), all the above and attend the many TPUG meetings in the **Toronto Area**

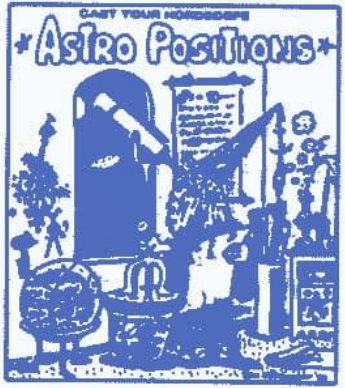
* * * * * * * * * * * * *

SPECIAL RATE FOR Ottawa 6502 members!!!

Contact Don White for details.

* * * * * * * * * * * * *

Software for Commodore-64



ASTRO POSITIONS

display and print the position of the sun and stars (one arc second accuracy) and the position of the moon and the planets (one arc minute accuracy except for Pluto) for any date in history

includes *User's Guide, Introduction to Positional Astronomy and Introduction to Classical Astrology.*

DISK 33.95 US 42.95 CAN

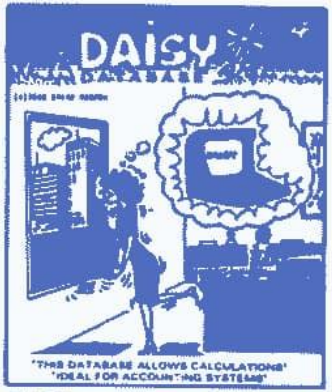
EDIT/ASM II

- DESIGNED TO HELP YOU CREATE AND MODIFY 6502 Assembly Language Programs on the Commodore 64 Computer

ON SCREEN HELP SYSTEM to assist you in using all commands available

add, assemble, calculate, delete, directory, disk, edit, find, help, insert, list load, merge, new, plist, quit, and save

DISK 28.95 US 36.95 CAN



DAISY

DAtabase Information SYstem

one of the comprehensive DATABASE SYSTEMS for the 64

fully bilingual on screen

calculates, compute the contents of numeric fields – add, subtract, multiply or divide against the defined field using either constant value of the contents of any other field in the record. Virtual disk operation.

DISK 31.95 US 39.95 CAN

WORDS & CALC

Powerful household finance – Business system

eliminate inconvenient files, confusing tables and tedious calculations

store all your data on WORDS & CALCS spreadsheet

WORDS & CALCS will do your work for you in organizing, displaying storing, printing and performing calculations

DISK 33.95 US 42.95 CAN

YES! You CAN get quality software at a reasonable price.

Write for our FREE catalog.

Money Order, Check, Visa or Mastercard. Dealer and distributor inquiries invited.

KING MICROWARE Ltd.

Suite 210,
5950 Côte des neiges
Montreal, Quebec H3S 1Z6
Canada